## Manheim Township School District

## Debt Profile \& Capital Project Financing Review

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## RBC Capital Markets



## Manheim Township School District

## Gross Debt Service Outstanding

As of July 1, 2017

| As of Fiscal Year Ending June 30 | (1) <br> Series of 2010 G.O. Bonds | (2) | (3) <br> Series of 2013 G.O. Bonds | (4) <br> Series of 2014 G.O. Bonds | (5) <br> Series of 2014A FRN | (6) <br> 2011 <br> Swap | (7) <br> Series of 2015 G.O. Bonds | (8) <br> Series of 2016 G.O. Note | (9) <br> Series of 2017 G.O. Note | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 395,764 | 517,435 | 821,500 | 315,963 | 5,817,575 | 1,963,523 | 2,315,900 | 265,760 | 143,432 | 12,556,852 |
| 2019 | 435,514 | 516,973 | 819,600 | 335,893 | 5,906,700 | 1,748,910 | 2,308,638 | 264,550 | 211,673 | 12,548,449 |
| 2020 | 964,139 | 516,648 | 822,100 | 1,080,455 | 6,094,850 | 1,525,842 | 822,150 | 263,340 | 331,558 | 12,421,081 |
| 2021 | 992,609 | 515,348 | 818,850 | 1,329,285 | 7,071,275 | 1,293,714 |  | 267,130 | 208,696 | 12,496,906 |
| 2022 | 1,023,859 | 513,048 |  | 1,334,445 | 8,080,050 | 1,020,114 |  | 265,810 | 278,581 | 12,515,906 |
| 2023 | 1,062,934 | 515,093 |  | 1,325,690 | 8,365,875 | 702,423 |  | 264,490 | 311,864 | 12,548,368 |
| 2024 | 1,504,781 | 516,543 |  | 1,333,140 | 8,284,113 | 370,841 |  | 263,170 | 314,345 | 12,586,932 |
| 2025 | 8,140,781 | 517,280 |  | 1,331,578 | 1,007,500 | 40,265 |  | 266,850 | 1,516,711 | 12,820,965 |
| 2026 |  | 517,280 |  | 1,329,458 |  |  |  | 3,565,420 | 7,436,483 | 12,848,641 |
| 2027 |  | 516,620 |  | 1,329,425 |  |  |  | 5,871,390 |  | 7,717,435 |
| 2028 |  | 515,490 |  | 1,331,200 |  |  |  |  |  | 1,846,690 |
| 2029 |  | 513,665 |  |  |  |  |  |  |  | 513,665 |
| 2030 |  | 516,015 |  |  |  |  |  |  |  | 516,015 |
| 2031 |  | 516,910 |  |  |  |  |  |  |  | 516,910 |
| 2032 |  | 512,340 |  |  |  |  |  |  |  | 512,340 |
| 2033 |  | 516,500 |  |  |  |  |  |  |  | 516,500 |
| Total | 14,520,380 | 8,253,185 | 3,282,050 | 12,376,530 | 50,627,938 | 8,665,632 | 5,446,688 | 11,557,910 | 10,753,341 | 125,483,653 |


| Associated Project | Landis Run, <br> Bucher | Landis Run, <br> miscellaneous | 2001 Capital <br> Project | Bucher, <br> miscellaneous | High School | High School | Bucher | Landis Run, |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bucher | Bucher |  |  |  |  |  |  |  |

(1) Partially refunded by $2016 \& 2017$ Note, callable $8 / 1 / 18$, average remaining coupon $3.30 \%$.
(2) Callable $8 / 1 / 17$, average coupon $2.65 \%$.
(3) Non-callable, average coupon $2.91 \%$.
(4) Call date required $12 / 1 / 18$, average coupon $3.24 \%$.
(5) 2014A FRN at budget rate of $0.75 \%$, callable $11 / 1 / 17$, mandatory tender $5 / 1 / 18$.
(6) Swap payments per new confirm.
(7) Non-callable, average coupon $2.83 \%$.
(8) Fulton Bank loan, fixed at $2.20 \%$.
9) TD Bank loan, fixed at $2.29 \%$.

## Manheim Township School District Net Debt Service Outstanding <br> As of July 1, 2017

| As of Fiscal Year Ending June 30 | $\begin{gathered} \text { Series of } \\ 2010 \\ \text { G.O. Bonds } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Series of } \\ 2012 \\ \text { G.O. Bonds } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Series of } \\ 2013 \\ \text { G.O. Bonds } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Series of } \\ 2014 \\ \text { G.O. Bonds } \end{gathered}$ | $\begin{gathered} \text { Series of } \\ \text { 2014A } \\ \text { FRN } \\ \hline \end{gathered}$ | 2011 <br> Swap | $\begin{gathered} \text { Series of } \\ 2015 \\ \text { G.O. Bonds } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Series of } \\ & 2016 \\ & \text { G.O. Note } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Series of } \\ 2017 \\ \text { G.O. Note } \\ \hline \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 354,865 | 480,179 | 768,087 | 286,720 | 5,356,239 | 1,963,523 | 2,107,351 | 238,296 | 128,610 | 11,683,871 |
| 2019 | 390,508 | 479,750 | 766,310 | 304,806 | 5,438,297 | 1,748,910 | 2,100,743 | 237,211 | 189,798 | 11,656,332 |
| 2020 | 864,504 | 479,448 | 768,648 | 980,459 | 5,611,526 | 1,525,842 | 748,115 | 236,126 | 297,295 | 11,511,963 |
| 2021 | 890,032 | 478,242 | 765,609 | 1,206,260 | 6,510,521 | 1,293,714 | 0 | 239,525 | 187,129 | 11,571,031 |
| 2022 | 918,053 | 476,108 | 0 | 1,210,942 | 7,439,299 | 1,020,114 | 0 | 238,341 | 249,792 | 11,552,649 |
| 2023 | 953,090 | 478,005 | 0 | 1,202,997 | 7,702,458 | 702,423 | 0 | 237,158 | 279,635 | 11,555,767 |
| 2024 | 1,349,277 | 479,351 | 0 | 1,209,758 | 7,627,180 | 370,841 | 0 | 235,974 | 281,860 | 11,554,240 |
| 2025 | 7,299,510 | 480,035 | 0 | 1,208,340 | 927,605 | 40,265 | 0 | 239,274 | 1,359,974 | 11,555,002 |
| 2026 | 0 | 480,035 | 0 | 1,206,416 | 0 | 0 | 0 | 3,196,968 | 6,667,994 | 11,551,414 |
| 2027 | 0 | 479,423 | 0 | 1,206,387 | 0 | 0 | 0 | 5,264,639 | 0 | 6,950,448 |
| 2028 | 0 | 478,374 | 0 | 1,207,997 | 0 | 0 | 0 | 0 | 0 | 1,686,371 |
| 2029 | 0 | 476,681 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 476,681 |
| 2030 | 0 | 478,861 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 478,861 |
| 2031 | 0 | 479,692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 479,692 |
| 2032 | 0 | 475,451 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 475,451 |
| 2033 | 0 | 479,311 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 479,311 |
| Total | 13,019,839 | 7,658,947 | 3,068,654 | 11,231,081 | 46,613,125 | 8,665,632 | 4,956,208 | 10,363,512 | 9,642,087 | 115,219,085 |


| 2016-17 MVAR | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ | $39.67 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Reimb \% | $26.05 \%$ | $18.15 \%$ | $16.39 \%$ | $23.33 \%$ | $19.99 \%$ | $0.00 \%$ | $22.70 \%$ | $26.05 \%$ |
| State Effort | $10.33 \%$ | $7.20 \%$ | $6.50 \%$ | $9.26 \%$ | $7.93 \%$ | $0.00 \%$ | $9.01 \%$ | $10.33 \%$ |
| Local Effort | $89.67 \%$ | $92.80 \%$ | $93.50 \%$ | $90.74 \%$ | $92.07 \%$ | $100.00 \%$ | $90.99 \%$ | $89.67 \%$ |

## Manheim Township School District <br> Gross Principal Outstanding

As of July 1, 2017

| As of Fiscal Year Ending June 30 | (1) <br> Series of 2010 G.O. Bonds | (2) <br> Series of 2012 G.O. Bonds | (3) <br> Series of 2013 G.O. Bonds | (4) <br> Series of 2014 G.O. Bonds | (5) <br> Series of 2014A <br> FRN | (7) <br> Series of 2015 G.O. Bonds | (8) <br> Series of 2016 G.O. Note | (9) <br> Series of 2017 G.O. Note | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 10,000 | 350,000 | 730,000 | 5,000 | 5,450,000 | 2,185,000 | 55,000 | 5,000 | 8,790,000 |
| 2019 | 50,000 | 355,000 | 750,000 | 25,000 | 5,580,000 | 2,245,000 | 55,000 | 5,000 | 9,065,000 |
| 2020 | 580,000 | 360,000 | 775,000 | 770,000 | 5,810,000 | 810,000 | 55,000 | 125,000 | 9,285,000 |
| 2021 | 625,000 | 365,000 | 795,000 | 1,035,000 | 6,830,000 |  | 60,000 | 5,000 | 9,715,000 |
| 2022 | 675,000 | 370,000 |  | 1,065,000 | 7,890,000 |  | 60,000 | 75,000 | 10,135,000 |
| 2023 | 735,000 | 380,000 |  | 1,085,000 | 8,235,000 |  | 60,000 | 110,000 | 10,605,000 |
| 2024 | 1,200,000 | 390,000 |  | 1,125,000 | 8,215,000 |  | 60,000 | 115,000 | 11,105,000 |
| 2025 | 7,875,000 | 400,000 |  | 1,160,000 | 1,000,000 |  | 65,000 | 1,320,000 | 11,820,000 |
| 2026 |  | 410,000 |  | 1,195,000 |  |  | 3,365,000 | 7,270,000 | 12,240,000 |
| 2027 |  | 420,000 |  | 1,235,000 |  |  | 5,745,000 |  | 7,400,000 |
| 2028 |  | 430,000 |  | 1,280,000 |  |  |  |  | 1,710,000 |
| 2029 |  | 440,000 |  |  |  |  |  |  | 440,000 |
| 2030 |  | 455,000 |  |  |  |  |  |  | 455,000 |
| 2031 |  | 470,000 |  |  |  |  |  |  | 470,000 |
| 2032 |  | 480,000 |  |  |  |  |  |  | 480,000 |
| 2033 |  | 500,000 |  |  |  |  |  |  | 500,000 |
| Total | 11,750,000 | 6,575,000 | 3,050,000 | 9,980,000 | 49,010,000 | 5,240,000 | 9,580,000 | 9,030,000 | 104,215,000 |


| Associated Project | Landis Run, <br> Bucher | Landis Run, <br> miscellaneous | 2001 Capital <br> Project | Bucher, <br> miscellaneous | High School |
| :---: | :---: | :---: | :---: | :---: | :---: | Bucher | Landis Run, |
| :---: |
| Bucher |

## Refunding Recap

Series of 2010 Bonds

FINAL Refunding Summary - 2010 Bonds - 2017 TD Bank Loan, fixed at 2.29\%

| Summary of Refunding Results |  |
| :--- | ---: |
| Par Amount of Refunded Bonds | $\$ 8,545,000$ |
| Par Amount of Refunding Bonds | $\$ 9,030,000$ |
| Arbitrage Yield | $2.290 \%$ |
| Present Value Savings (\$) | 8.1765 |
| Present Value Savings (\%) | $11,750,000$ |
| Unrefunded Par Amount (\$) | $08 / 01 / 2018$ |
| Call Date (2010 Bonds): |  |
|  |  |
| Sources and Uses of Funds | $\$ 9,030,000$ |
| Sources: | $\$ 9,030,000$ |
| Bond Par Amount | $\$ 8,931,038$ |
| Total Sources | 93,995 |
| Uses: | 4,967 |
| Refunding Escrow Deposits | $\$ 9,030,000$ |
| Estimated Costs of Issuance |  |
| Additional Proceeds |  |
| Total Uses |  |



FINAL Refunding Summary - 2010 Bonds - 2016 Fulton Bank Loan, fixed at 2.20\%
As reviewed at Board meeting on December 15, 2016

| Summary of Refunding Results |  |
| :--- | ---: |
| Par Amount of Refunded Bonds | $\$ 9,040,000$ |
| Par Amount of Refunding Bonds | $\$ 9,725,000$ |
| Arbitrage Yield | $2.200 \%$ |
| Present Value Savings (\$) | $9.70,490$ |
| Present Value Savings (\%) | $20,300,000$ |
| Unrefunded Par Amount (\$) | $08 / 01 / 2018$ |
| Call Date (2010 Bonds): |  |
|  |  |
|  |  |
| Sources and Uses of Funds | $\$ 9,725,000$ |
| Sources: | $\$ 9,725,000$ |
| Bond Par Amount | $\$ 9,620,100$ |
| Total Sources | 102,175 |
| Uses: | 2,725 |
| Refunding Escrow Deposits | $\$ 9,725,000$ |
| Estimated Costs of Issuance |  |
| Additional Proceeds |  |
| Total Uses |  |



Project Financing Update

Scenario 1B: \$70,000,000 Project, 7-year Millage Phase-In, Wraparound Debt As Reviewed at 3/16/17 Board Meeting

| 09-Feb-17 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal <br> Year Ending | Total Net Outstanding D/S | $\begin{array}{\|c\|} \hline \text { Series of } 2019 \\ \$ 35,000,000 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Series of } 2020 \\ \$ 35,000,000 \\ \hline \end{array}$ | Less: <br> Interest <br> Earnings/ SD Reserves | Total <br> Net <br> Debt | Value of 1 Mill | Total <br> Mills Required | New Equivalent Mills | Total Mills in Place | Dollars Appropriated | Budget Surplus (Deficit) |
| 2017 | 11,959,746 | 0 | 0 |  | 11,959,746 | 3,150,000 | 3.80 | 0.000 | 3.86 | 12,158,000 | 198,254 |
| 2018 | 11,854,538 | 0 | 0 |  | 11,854,538 | 3,150,000 | 3.76 | 0.112 | 3.97 | 12,510,800 | 656,262 |
| 2019 | 11,765,811 | 0 | 0 |  | 11,765,811 | 3,150,000 | 3.74 | 0.112 | 4.08 | 12,863,600 | 1,097,789 |
| 2020 | 11,513,946 | 1,585,665 | 0 |  | 13,099,611 | 3,150,000 | 4.16 | 0.112 | 4.20 | 13,216,400 | 116,789 |
| 2021 | 11,683,179 | 1,416,771 | 1,529,780 | 1,060,530 | 13,569,200 | 3,150,000 | 4.31 | 0.112 | 4.31 | 13,569,200 | 0 |
| 2022 | 11,602,134 | 1,496,771 | 1,529,652 | 706,557 | 13,922,000 | 3,150,000 | 4.42 | 0.112 | 4.42 | 13,922,000 | 0 |
| 2023 | 11,575,408 | 1,524,539 | 1,529,513 | 351,510 | 14,277,950 | 3,150,000 | 4.53 | 0.113 | 4.53 | 14,277,950 | 0 |
| 2024 | 11,571,657 | 1,526,250 | 1,529,363 |  | 14,627,270 | 3,150,000 | 4.64 | 0.113 | 4.65 | 14,633,900 | 6,630 |
| 2025 | 11,646,513 | 1,452,559 | 1,529,203 |  | 14,628,274 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 5,625 |
| 2026 | 11,653,559 | 1,446,015 | 1,529,031 |  | 14,628,605 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 5,295 |
| 2027 | 6,950,448 | 6,149,539 | 1,528,847 |  | 14,628,833 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 5,066 |
| 2028 | 1,686,371 | 11,412,331 | 1,528,655 |  | 14,627,357 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 6,543 |
| 2029 | 476,681 | 12,622,693 | 1,528,454 |  | 14,627,827 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 6,073 |
| 2030 | 478,861 | 8,024,940 | 6,128,247 |  | 14,632,048 | 3,150,000 | 4.65 | 0.000 | 4.65 | 14,633,900 | 1,851 |
| 2031 | 479,692 | 0 | 14,148,916 |  | 14,628,608 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 5,292 |
| 2032 | 475,451 | 0 | 14,153,810 |  | 14,629,261 | 3,150,000 | 4.64 | 0.000 | 4.65 | 14,633,900 | 4,639 |
| 2033 | 479,311 | 0 | 4,335,090 |  | 4,814,401 | 3,150,000 | 1.53 | 0.000 | 4.65 | 14,633,900 | 9,819,498 |
| Total | 127,853,306 | 48,658,073 | 52,528,559 | 2,118,597 | 226,921,340 |  |  | 0.786 |  |  |  |

(1) Annual Net Debt Service for Series of 2009A, 2010, 2012, 2013, 2014, 2014 A FRN, 2011 Swap, and 2015 Bonds.
(2) Proposed Series 2019, $\$ 35,000,000$ dated March 1, 2019. Avg. Coupon $4.08 \%$ (current rates $+1 \%$ contingency). Local Effort $100 \%$
(3) Proposed Series 2020, \$35,000,000 dated March 1, 2020. Avg. Coupon 4.36\% (current rates $+1 \%$ contingency). Local Effort $100 \%$
(6) FY2016-17 collect mill is worth $\$ 3,150,000$ and it remains constant (per the administration February 2017).
(9) Assumes District currently funded to approximately $\$ 12,158,000$ (FY 2016-2017) for annual NET debt service.
(11) Annual surpluses could be used for capital project costs to reduce final borrowing amount or to phase in mills.

Scenario 1B: Taxpayer Impact As Reviewed at 3/16/17 Board Meeting

## Manheim Township School District <br> Taxpayer Impact Study - 7 Year Phase-In - Wraparound <br> For Illustration Purposes Only

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ending | Millage Increase | \$100,000 | Annua \$150,000 | pact by As $\$ 163,500$ | Value $\$ 200,000$ | \$250,000 |
| 06/30/2017 | 0.000 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 06/30/2018 | 0.112 | \$11.20 | \$16.80 | \$18.31 | \$22.40 | \$28.00 |
| 06/30/2019 | 0.112 | \$22.40 | \$33.60 | \$36.62 | \$44.80 | \$56.00 |
| 06/30/2020 | 0.112 | \$33.60 | \$50.40 | \$54.94 | \$67.20 | \$84.00 |
| 06/30/2021 | 0.112 | \$44.80 | \$67.20 | \$73.25 | \$89.60 | \$112.00 |
| 06/30/2022 | 0.112 | \$56.00 | \$84.00 | \$91.56 | \$112.00 | \$140.00 |
| 06/30/2023 | 0.113 | \$67.30 | \$100.95 | \$110.04 | \$134.60 | \$168.25 |
| 06/30/2024 | 0.113 | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2025 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2026 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2027 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2028 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2029 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2030 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2031 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2032 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| 06/30/2033 |  | \$78.60 | \$117.90 | \$128.51 | \$157.20 | \$196.50 |
| TOTAL | 0.786 | \$1,021.30 | \$1,531.95 | \$1,669.83 | \$2,042.60 | \$2,553.25 |


| 08-Jun-17 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal <br> Year Ending | Total Net Outstanding D/S | Series of 2019 $\$ 31,000,000$ | $\begin{array}{\|c\|} \hline \text { Series of } 2020 \\ \$ 31,000,000 \\ \hline \end{array}$ | Less: <br> Interest <br> Earnings/ <br> SD Reserves | Total <br> Net <br> Debt | Value of <br> 1 Mill | Total <br> Mills Required | New Equivalent Mills | Total Mills in Place | Dollars Appropriated | Budget Surplus (Deficit) |
| 2018 | 11,683,871 | 0 | 0 |  | 11,683,871 | 3,150,000 | 3.71 | 0.070 | 3.93 | 12,378,500 | 694,629 |
| 2019 | 11,656,332 | 0 | 0 |  | 11,656,332 | 3,250,000 | 3.59 | 0.070 | 4.00 | 12,998,968 | 1,342,636 |
| 2020 | 11,511,963 | 1,311,375 | 0 |  | 12,823,338 | 3,250,000 | 3.95 | 0.070 | 4.07 | 13,226,468 | 403,130 |
| 2021 | 11,571,031 | 1,254,899 | 1,346,568 | 718,530 | 13,453,968 | 3,250,000 | 4.14 | 0.070 | 4.14 | 13,453,968 | 0 |
| 2022 | 11,552,649 | 1,269,766 | 1,346,435 | 487,382 | 13,681,468 | 3,250,000 | 4.21 | 0.070 | 4.21 | 13,681,468 | 0 |
| 2023 | 11,555,767 | 1,269,194 | 1,346,292 | 262,285 | 13,908,968 | 3,250,000 | 4.28 | 0.070 | 4.28 | 13,908,968 | 0 |
| 2024 | 11,554,240 | 1,268,586 | 1,346,140 |  | 14,168,966 | 3,250,000 | 4.36 | 0.080 | 4.36 | 14,168,968 | 2 |
| 2025 | 11,555,002 | 1,267,940 | 1,345,979 |  | 14,168,921 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | 47 |
| 2026 | 11,551,414 | 1,272,248 | 1,345,806 |  | 14,169,467 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | -499 |
| 2027 | 6,950,448 | 5,876,338 | 1,345,624 |  | 14,172,409 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | -3,441 |
| 2028 | 1,686,371 | 11,140,398 | 1,345,434 |  | 14,172,203 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | -3,235 |
| 2029 | 476,681 | 12,350,619 | 1,345,235 |  | 14,172,535 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | -3,566 |
| 2030 | 478,861 | 4,638,235 | 9,055,029 |  | 14,172,125 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | $-3,157$ |
| 2031 | 479,692 | 0 | 13,693,684 |  | 14,173,376 | 3,250,000 | 4.36 | 0.000 | 4.36 | 14,168,968 | -4,408 |
| 2032 | 475,451 | 0 | 11,024,640 |  | 11,500,091 | 3,250,000 | 3.54 | 0.000 | 4.36 | 14,168,968 | 2,668,877 |
| 2033 | 479,311 | 0 | 0 |  | 479,311 | 3,250,000 | 0.15 | 0.000 | 4.36 | 14,168,968 | 13,689,657 |
| Total | 115,219,085 | 42,919,598 | 45,886,864 | 1,468,197 | 202,557,350 |  |  | 0.500 |  |  |  |

(1) Annual Net Debt Service for Series of 2009A, 2010, 2012, 2013, 2014, 2014A FRN, 2011 Swap, and 2015 Bonds.
(2) Proposed Series 2019, $\$ 31,000,000$ dated March 1, 2019. Avg. Coupon 4.05\% (current rates + 1\% contingency). Local Effort 100\%
(3) Proposed Series 2020, $\$ 31,000,000$ dated March 1, 2020. Avg. Coupon 4.33\% (current rates $+1 \%$ contingency). Local Effort $100 \%$
(6) FY2017-18 collect mill is worth $\$ 3,150,000$ and rises in FY2018-19 to $\$ 3,250,000$ due to projected assessment grown in District.
(9) Assumes District currently funded to approximately $\$ 12,158,000$ (FY 2016-2017) for annual NET debt service.
(11) Annual surpluses could be used for capital project costs to reduce final borrowing amount or to phase in mills.

## Manheim Township School District

## Taxpayer Impact Study - 7 Year Phase-In - Wraparound

For Illustration Purposes Only

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Annual Tax Impact by Assessed Value |  |  |  |  |
| Fiscal Year Ending | Millage Increase | \$100,000 | \$150,000 | \$164,200 | \$200,000 | \$250,000 |
| 06/30/2017 | 0.000 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 06/30/2018 | 0.070 | \$7.00 | \$10.50 | \$11.49 | \$14.00 | \$17.50 |
| 06/30/2019 | 0.070 | \$14.00 | \$21.00 | \$22.99 | \$28.00 | \$35.00 |
| 06/30/2020 | 0.070 | \$21.00 | \$31.50 | \$34.48 | \$42.00 | \$52.50 |
| 06/30/2021 | 0.070 | \$28.00 | \$42.00 | \$45.98 | \$56.00 | \$70.00 |
| 06/30/2022 | 0.070 | \$35.00 | \$52.50 | \$57.47 | \$70.00 | \$87.50 |
| 06/30/2023 | 0.070 | \$42.00 | \$63.00 | \$68.96 | \$84.00 | \$105.00 |
| 06/30/2024 | 0.080 | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2025 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2026 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2027 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2028 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2029 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2030 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2031 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| 06/30/2032 |  | \$50.00 | \$75.00 | \$82.10 | \$100.00 | \$125.00 |
| TOTAL | 0.500 | \$597.00 | \$895.50 | \$980.27 | \$1,194.00 | \$1,492.50 |

Wraparound vs. Level Debt Discussion \& Statistics

RBC Capital Markets

|  | Option 1A | Option 1B | Option 2A | Option 2B | Option 3A | Option 3B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 13 Years | 13 Years | 13 Years | 13 Years | 20 Years | 20 Years |
| Structure | Wraparound | Wraparound | Level | Level | Level | Level |
| Total Cost* | \$97,526,787 | \$101,236,134 | \$84,435,888 | \$94,019,763 | \$99,236,669 | \$106,443,399 |
| PV Cost** | \$72,892,601 | \$76,601,948 | \$66,098,112 | \$75,681,987 | \$71,685,081 | \$78,891,881 |
| Total Millage | 0.786 | 0.786 | 2.007 | 2.007 | 1.555 | 1.555 |
| Annual Millage | 0.197 | 0.112 | 0.502 | 0.287 | 0.389 | 0.222 |
| Phase-In | 4 Years | 7 Years | 4 Years | 7 Years | 4 Years | 7 Years |

[^0]
## Level Debt

 ServiceWrap Debt Service
(incorporates existing debt into structure)

- Structured much like a home mortgage, level-debt service financing achieves equal annual debt service payments over the life of the obligation.
- In the early years of the financing, when interest payments on the outstanding principal are at their highest level, principal payments are at their lowest.
- As interest payments decrease over the life of the issue, principal payments increase, which result in equal debt service payments each year.
- When an Issuer has several outstanding bond issues, all structured as level debt, the resulting overall debt service is not level and is more burdensome in the earlier years.
- An alternative to the level debt service structure is the wrap-around debt issuance which essentially wraps the amortized principal and interest payments around the current outstanding debt service.
- This allows the Issuer to minimize debt service payments in the years immediately following the issuance of new debt at a time when an Issuer's existing debt service payments may be at its highest levels.
- The benefits of utilizing this approach are that the debt service in the immediate future is lower and the Issuer's overall debt service payments are level.
- The wrap-around structure increases principal payments in the later maturities which will increase total debt service due over the life of the issue.

Level Debt Service


Wrap Debt Service


## Statistics for Wraparound and Level Debt Financing Structures

- Study 1: Sampling of PA School Districts
- 141 schools reviewed with outstanding debt generally incurred in last 7 years
- 491 Financings completed and on file at DCED (Department of Community and Economic Development)
- 375 Financings used wraparound debt ( $76 \%$ ), 116 used level debt ( $24 \%$ )
- Study 2: Lancaster County School Districts
- 15 schools used in study (Solanco has no debt outstanding)
- 82 Financings completed and on file at DCED
- 61 Financings used wraparound debt ( $75 \%$ ), 21 used level debt (25\%)
- Study 3: Manheim Township School District
- Currently 8 Financings outstanding
- 6 Financings used wraparound debt ( $75 \%$ ), 2 used level debt ( $25 \%$ )
- Since 2001, $\$ 126,000,000$ of new project debt financings
- 4 Financings utilized wraparound debt totaling $\$ 86,000,000$ (Landis Run and HS Projects)
- 4 Financings utilized level debt totaling $\$ 40,000,000$



## \$ 19,155,000 <br> MANHEIM TOWNSHIP <br> Lancaster County, Pennsylvania <br> General Obligation Bonds, Series of 2009

Dated: Date of Delivery<br>Due: December 1 , as shown on the inside front cover

Interest Payable: June 1 and December
First Interest Payment: June 1, 2010
Form: Book- Entry Only
Legal Investment for Fiduciaries in Pennsylvania: The 2009 Bonds (hereinafter defined) are legal investment for fiduciaries in the Commonwealth of Pennsylvania under the Probate, Estate and Fiduciaries Code, Act of June 30, 1972, No. 164, PL.. 508 as amended and supplemented.
Payable: The General Obligation Bonds, Series of 2009 (the "Bonds" or "2009 Bonds") in the aggregate principal amount of \$19,155,000 are being issued by Manheim Township, Lancaster County, Pennsylvania (the "Township") pursuant to the Pennsylvania Local Government Unit Debt Act and under an Ordinance enacted by the Township Commissioners (the "Ordinance"). The Bonds will be dated the date of delivery interest rates set forth on the inside cover. The Bonds will be issued as fully registered bonds without coupons, and, when issued, will be egistered in the name of CEDE \& CO., as nominee for The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds. Beneficial ownership interests in the Bonds will be recorded in book-entry-only form in denominations of $\$ 5,000$, or any integral multiple thereof. Principal of and interest on the Bonds are payable directly to CEDE \& CO. for redistribution to DTC their ownership interests in the Bonds purchased. For so long as any purchaser is the Beneficial Owner of a Bond, such purchaser must maintain an account with a broker or dealer who is, or acts through, a DTC Participant to receive payment of the principal of and interest on such Bonds. See "Book-Entry-Only System" herein.
Redemption: The Bonds are subject to redemption prior to their stated maturity dates as provided herein.
Purpose: Proceeds of the Bonds will be used to (1) finance capital projects of the Township including, without limitation, the land acquisition, and design and construction of improvements, relating to water system, parks and recreation and public library facilities; and (2) pay the costs $f$ issuing the Bonds.
Security: In the Ordinance, the Township covenants with the holders of the Bonds that it will include the amount of the debt service to be paid on the Bonds for each fiscal year in which such sums are payable in its budget for that fiscal year, will appropriate such amounts to the payment of such debt service and will duly and punctually pay or cause to be paid the principal of every Bond and the interest thereon at the dates and places and in the manner stated in the Bonds, according to the true intent and meaning therrof, and for such budgeting, appropriation and payment, the Township has pledged its full faith, credit and taxing power. As provided in the Pennsylvania Local Government Unit Debt Act, he foregoing covenant shall be specifically enforceable

The Bonds are offered for delivery when, as and if issued by the Township and received by the Underwriter and subject to the approving legal opinion of Hartman Underhill \& Brubaker LLP, Lancaster, Pennsylvania, Bond Counsel. It is expected that the Bonds will be available for delivery, through the facilities of DTC, on or about July 30, 2009.


RBC Capital Markets ${ }^{\text {® }}$

|  | $\$ 19,155,000$ <br> MANHEIM TOWNSHIP <br> Lancaster County, Pennsylvania General Obligation Bonds - Series of 2009 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Payment Date |  | Principal | Coupon |  | Interest |  | Debt Service | Fiscal Year <br> Ended <br> June 30 |  | Fiscal Debt Serrice |
| June 1, 2010 |  |  |  | s | 651,838.50 | s | 651,838.50 |  |  |  |
| Decerber 1, 2010 | s | 95,000 | 2.000\% |  | 389.803.76 |  | 484,803.76 | 2010 | s | 1.136,642.26 |
| June 1, 2011 |  |  |  |  | 388,853.76 |  | 388,853.76 |  |  |  |
| December 1, 2011 |  | 545,000 | 2500 |  | 388,853.76 |  | 933,853.76 | 2011 |  | 1,322,707.52 |
| Jume 1, 2012 |  |  |  |  | 382,041.26 |  | 382,041.26 |  |  |  |
| December 1, 2012 |  | 560,000 | 4.000 |  | 382,041.26 |  | 942,041.26 | 2012 |  | 1,324,082.52 |
| June 1, 2013 |  |  |  |  | 370,841.26 |  | 370,841.26 |  |  |  |
| Decermber 1,2013 |  | 585,000 | 3.000 |  | 370,841.26 |  | 955,841.26 | 2013 |  | 1.326,682.52 |
| June 1, 2014 |  |  |  |  | 362,066.26 |  | 362,066.26 |  |  |  |
| Decermber 1.2014 |  | 600,000 | 5.000 |  | 362,066.26 |  | 962,066.26 | 2014 |  | 1.324,132.50 |
| June 1, 2015 |  |  |  |  | 347,066.26 |  | 347,06626 |  |  |  |
| Deceriber 1,2015 |  | 635,000 | 2.500 |  | 347,066.26 |  | 982,06626 | 2015 |  | 1,329,132.50 |
| June 1, 2016 |  |  |  |  | 339,128.76 |  | 339,128.76 |  |  |  |
| December 1,2016 |  | 650,000 | 5.000 |  | 339,128.76 |  | 989,128.76 | 2016 |  | 1,328,257.52 |
| June 1, 2017 |  |  |  |  | 322,878.76 |  | 322,878.76 |  |  |  |
| Decermer 1,2017 |  | 675,000 | 3.000 |  | 322,878.76 |  | 997,878.76 | 2017 |  | 1,320,757.52 |
| June 1, 2018 |  |  |  |  | 312.753 .76 |  | 312,753.76 |  |  |  |
| December 1,2018 |  | 700,000 | 3.200 |  | 312,753.76 |  | 1,012.753.76 | 2018 |  | 1,325,507.52 |
| June 1, 2019 |  |  |  |  | 301,553.76 |  | 301.553.76 |  |  |  |
| December 1,2019 |  | 725,000 | 3.400 |  | 301.553.76 |  | 1,026,553.76 | 2019 |  | 1,328,107.52 |
| June 1, 2020 |  |  |  |  | 289.228.76 |  | 289,228.76 |  |  |  |
| Deceriber 1,2020 |  | 745,000 | 3.500 |  | 289.228.76 |  | 1,034.228.76 | 2020 |  | 1,323,457.52 |
| June 1, 2021 |  |  |  |  | 276,191.26 |  | 276,191.26 |  |  |  |
| December 1,2021 |  | 775,000 | 3.700 |  | 276,191.26 |  | 1,051,191.26 | 2021 |  | 1,327,382.52 |
| June 1, 2022 |  |  |  |  | 261.853 .76 |  | 261,853.76 |  |  |  |
| December 1,2022 |  | 800,000 | 3.850 |  | 261,853.76 |  | 1,061,853.76 | 2022 |  | 1,323,707.52 |
| June 1, 2023 |  |  |  |  | 246.453.76 |  | 246,453.76 |  |  |  |
| Deceriber 1,2023 |  | 835,000 | 4.000 |  | 246,453.76 |  | 1,081,453.76 | 2023 |  | 1.327,907.52 |
| June 1, 2024 |  |  |  |  | 229.753 .76 |  | 229,753.76 |  |  |  |
| December 1,2024 |  | 870,000 | 4.000 |  | 229,753.76 |  | 1,099.753.76 | 2024 |  | 1.329,507.52 |
| June 1, 2025 |  |  |  |  | 212,353.76 |  | 212,353.76 |  |  |  |
| December 1,2025 |  | 900,000 | 4.100 |  | 212,353.76 |  | 1,112,353.76 | 2025 |  | 1.324,707.52 |
| June 1. 2026 |  |  |  |  | 193,903.76 |  | 193,903.76 |  |  |  |
| December 1,2026 |  | 935,000 | 4.200 |  | 193.903.76 |  | 1,128.903.76 | 2026 |  | 1.322,807.52 |
| June 1. 2027 |  |  |  |  | 174.268.76 |  | 174,268.76 |  |  |  |
| Decermber 1,2027 |  | 975,000 | 4.300 |  | 174.268.76 |  | 1,149,268.76 | 2027 |  | 1.323,537.52 |
| June 1, 2028 |  |  |  |  | 153,306.26 |  | 153,306.26 |  |  |  |
| Decermer 1,2028 |  | 1,020,000 | 4.375 |  | 153,306.26 |  | 1,173,306.26 | 2028 |  | 1.326,612.52 |
| June 1, 2029 |  |  |  |  | 130,993.75 |  | 130,993.75 |  |  |  |
| Decerber 1,2029 |  | 1,065,000 | 4.500 |  | 130,993.75 |  | 1,195,993.75 | 2029 |  | 1,326,987.50 |
| June 1, 2030 |  |  |  |  | 107,031.25 |  | 107,031.25 |  |  |  |
| December 1,2030 |  | 810,000 | 4.700 |  | 107,031.25 |  | 917,031.25 | 2030 |  | 1,024,062.50 |
| June 1, 2031 |  |  |  |  | 87,996.25 |  | 87,996.25 |  |  |  |
| December 1,2031 |  | 850,000 | 4.700 |  | 87,996.25 |  | 937,996.25 | 2031 |  | 1,025,992.50 |
| June 1, 2032 |  |  |  |  | 68,021.25 |  | 68,021.25 |  |  |  |
| Deceriber 1,2032 |  | 890,000 | 4.850 |  | 68,021.25 |  | 958,021.25 | 2032 |  | 1,026,042.50 |
| June 1. 2033 |  |  |  |  | 46,438.75 |  | 46,438.75 |  |  |  |
| December 1,2033 |  | 935,000 | 4.850 |  | 46,438.75 |  | 981,438.75 | 2033 |  | 1,027,877.50 |
| June 1, 2034 |  |  |  |  | $23,765.00$ |  | 23,765.00 |  |  |  |
| December 1,2034 |  | 980.000 | 4.850 |  | 23,765.00 |  | 1003,765.00 | 2034 |  | 1,027,530.00 |
| Total |  | 9,155,000 |  |  | 2,299,130.12 | s | 31,454,130.12 |  |  | 31,454,130.12 |

The date of this Official Statement is July $15,2009$.

## Act 1 Index - Millage Impact Summary

## Manheim Township School District <br> 5-Year Summary of Potential Act 1 Millage Impact at Index <br> For Illustration Purposes Only

| 1 | 2 |  | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year <br> Ending | Assumed Act 1 Index |  | Allowable Real <br> Estate Millage <br> Increase | Real Estate <br> Millage Rate | Allowable Real <br> Estate \$ <br> Increase |
| $06 / 30 / 2017$ |  |  |  | 19.0509 |  |
| $06 / 30 / 2018$ | Proposed Increase | $1.90 \%$ | 0.3620 | 19.4129 | $1,140,196$ |
| $06 / 30 / 2019$ | Assumed Index | $2.50 \%$ | 0.4853 | 19.8982 | $1,577,295$ |
| $06 / 30 / 2020$ | Assumed Index | $2.50 \%$ | 0.4975 | 20.3956 | $1,616,728$ |
| $06 / 30 / 2021$ | Assumed Index | $2.50 \%$ | 0.5099 | 20.9055 | $1,657,146$ |
| $06 / 30 / 2022$ | Assumed Index | $2.50 \%$ | 0.5226 | 21.4282 | $1,698,575$ |

Notes

* Per the District Administration, assumes 1 Collected Mill = \$3,250,000 beginning FY 2018-19
* Does not include any applicable PDE exceptions
* Historical Act 1 index for District below:

| Historical Act 1 Index for MTSD |  |  |
| :---: | :---: | :---: |
| Fiscal | Allowable Act 1 |  |
| Year | Index |  |
| 2017-18 | 2.50\% | (proposed tax increase is 1.9\%) |
| 2016-17 | 2.40\% | (actual tax increase was 2.2\%) |
| 2015-16 | 1.90\% | (actual tax increase was 0\%) |
| 2014-15 | 2.10\% |  |
| 2013-14 | 1.70\% |  |
| 2012-13 | 1.70\% | (actual increase was 3.96\% - used exceptions) |
| 2011-12 | 1.40\% |  |
| 2010-11 | 2.90\% |  |
| 2009-10 | 4.10\% |  |
| 2008-09 | 4.40\% |  |
| 2007-08 | 3.40\% |  |
| 2006-07 | 3.90\% | (actual tax increase was 4.50\% - first year of Act |


| PSERS Contributions for MTSD |  |
| :---: | :---: |
| Fiscal | \% of Tax Increase <br> Year <br> Dedicated to PSERS |
| $2017-18$ | $56.20 \%$ |
| $2016-17$ | $77.33 \%$ |
| $2015-16$ | $0.00 \%$ |
| $2014-15$ | $76.14 \%$ |
| $2013-14$ | $78.09 \%$ |
| $2012-13$ | $26.43 \%$ |
| $2011-12$ | $5.53 \%$ |
| $2010-11$ | $19.24 \%$ |
|  |  |


[^0]:    * Total cost calculated as total debt service plus District reserves less annual surplus (columns 2+3+4-11)
    ** PV cost calculated using PV at $3 \%$ for debt service plus District reserves less annual surplus

